

## Claims

1. A method for causing constriction of arterial microvasculature comprising co-administering to a vertebrate subject an effective amount of a cannabinoid receptor agonist and a COX-2 inhibitor.

5 2. The method of claim 1 wherein the subject is a mammal.

3. The method of claim 2 wherein the mammal is a human.

4. The method of claim 1 wherein the COX-2 inhibitor is also a COX-1 inhibitor.

10 5. The method of claim 1 wherein the COX-2 inhibitor is also a cannabinoid receptor agonist.

6. The method of claim 1 wherein the co-administration of the cannabinoid receptor agonist and the COX-2 inhibitor is by administering a single compound having both cannabinoid receptor agonist activity and COX-2 inhibitory activity.

15 7. The method of claim 1 wherein the COX-2 inhibitor is selected from the group consisting of rofecoxib, celecoxib, valdecoxib, paracoxib, etoricoxib, and NS-398.

8. The method of claim 1 wherein the cannabinoid receptor agonist is selected from the group consisting of  $\Delta^9$ -tetrahydrocannabinol,  $\Delta^8$ -tetrahydrocannabinol, anandamide, 2-arachidonyl glycerol, and methanandamide.

9. The method of claim 1 wherein the cannabinoid receptor agonist is a synthetic cannabinoid receptor agonist.

10. The method of claim 1 wherein the administration of the cannabinoid receptor agonist and the COX-2 inhibitor is systemic.

11. The method of claim 1 wherein the microvasculature is striated muscle microvasculature.

12. A method for increasing blood pressure in a subject comprising co-administering an effective amount of a cannabinoid receptor agonist and a COX-2 inhibitor in an amount effective to increase blood pressure in the subject.

13. The method of claim 12 wherein the subject is a mammal.

14. The method of claim 13 wherein the mammal is a human.

15. The method of claim 12 wherein, at the time of the co-administration, the subject is suffering from an acute decrease in blood pressure.

16. The method of claim 12 wherein the co-administration is by administering a chemical compound that has activity as a cannabinoid receptor agonist and activity as a COX-2 inhibitor.

17. A method for treating a subject suffering from or at risk of developing shock comprising co-administering to a vertebrate subject in need thereof a cannabinoid receptor agonist and a COX-2 inhibitor.

18. The method of claim 17 wherein the COX-2 inhibitor is also a COX-1 inhibitor.

19. The method of claim 17 wherein the co-administration is by administering a chemical compound that has activity as a cannabinoid receptor agonist and activity as a COX-2 inhibitor.

20. The method of claim 17 wherein the COX-2 inhibitor is selected from the group consisting of rofecoxib, celecoxib, valdecoxib, paracoxib, etoricoxib, and NS-398.

21. The method of claim 17 wherein the cannabinoid receptor agonist is selected from the group consisting of  $\Delta^9$ -tetrahydrocannabinol,  $\Delta^8$ -tetrahydrocannabinol, anandamide, 2-arachidonyl glycerol, and methanandamide.

22. The method of claim 17 wherein the cannabinoid receptor agonist is a synthetic cannabinoid receptor agonist.

23. The method of claim 17 wherein the administration of the cannabinoid receptor agonist and the COX-2 inhibitor is systemic.

24. The method of claim 17 wherein the subject is a mammal.

25. The method of claim 24 wherein the mammal is a human.

26. The method of claim 17 wherein the shock is hemorrhagic shock.

27. The method of claim 17 wherein the co-administration is to control hypotension associated with anesthetic agents.